

ABSTRACT OF THE DISCLOSURE

- Misalignment error between two periodic structures such as two overlay targets placed side-by-side is measured. The two structures are illuminated by coherent radiation and the positive and negative diffraction beams of the input beam
- 5 by the two structures are detected to discover the optical phase difference between the positive and negative diffraction beams. The misalignment between the two structures may then be ascertained from the phase difference.

09/639495